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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

BATES, KEVIN T

ART UNIT

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/936,286	Applicant(s) CUNCHON ET AL.	
	Examiner KEVIN BATES	Art Unit 2456	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 February 2011.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 7, 10, 14, 20 and 22-25 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 7, 10, 14, 20, and 22-25 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Response to Amendment

This Office Action is in response to a communication made on July 2, 2010.

Claims 7, 10, 14, and 20 are currently amended.

Claims 24-25 are newly added.

Claims 7, 10, 14, 20, and 22-25 are pending in this application.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 7, 10, 20, and 23-24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ilnicki (6751677) in view of Subramaniam (6081900).

Regarding claim 7, Ilnicki teaches a method allowing a client application running on a client machine linked to a client network to establish communication with a server application hosted in a server machine linked to a server network in order to exchange messages with the server application, said messages passing between the client network and the server network through a network layer of a gateway machine (Figure 3), the method comprising:

A) receiving a request from the client application to establish communication at a first security level to a first port on the server machine (Col. 5, lines 21 -25);

B) creating a first port on the gateway machine (Col. 5, lines 4 – 13);

C) creating at least one first created process on the gateway machine (Col. 8, lines 46 – 57);

D) establishing a first connection from the client application to the first port on the gateway machine, the first connection connecting the client machine to the gateway machine for the exchange of messages at the first security level (Col. 5, lines 21 -25);

E) creating a second port in the gateway machine (Col. 8, lines 46 – 57);

F) establishing a second connection from the second port of the gateway machine to the first port of the server machine, the second connection to be used to exchange messages at a second security level which is reduced from the first security level (Col. 8, lines 46 – 57); and

G) rerouting to the second port of the gateway machine messages sent from the client network addressed to the first port of the server machine (Col. 8, lines 46 – 57);

H) routing, to the first port of the gateway machine, messages received by the gateway machine that are addressed to the client application on the client machine (Col. 8, lines 46 – 57).

Illnicki does not explicitly indicate the first created process on the gateway machine handling security processing at the first security level of encryption for said messages sent and said messages received on the first port of the gateway machine, thereby removing from the server machine, security processing at the second security of encryption level for these messages.

Subramaniam teaches a system which redirects requests to a target server to a gateway/border server which creates a secure encrypted connection from that gateway to the client and a second differently secured connection from the gateway to the target server (Col. 6, lines 40 – 45; Col. 7, lines 24 – 35; Col. 8, lines 13 – 19; Col. 9, lines 11 – 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Subramaniam's teaching can be incorporated into Ilnicki's system so that if the network is configured that the gateway gets places on the edge of a private network, a secure connection needs only to be maintained as far as the public network and the security session information does not need to be continued into the more secure private network.

Regarding claim 10, Ilnicki teaches a method according to claim 7, wherein said steps D, E, and F are executed automatically by the first created process of the gateway machine and wherein said first created process generates the second process that executes said steps G and H (Col. 5, lines 21 -25, wherein using different processes for different operations of the gateway is an obvious variation of any program run on a computer).

Regarding claim 20, Ilnicki teaches a method according to claim 7, further comprising deleting, by ordering the network layer of the gateway machine, messages sent from the client network to a port other than the first located in the server machine regardless of a security level of said message sent to the port (Col. 5, lines 60 – 65,

where if the port is unauthorized to be sent through the gateway, then the messages will not be allowed to pass through the gateway).

Regarding claim 23, Inicki teaches a method as claimed in claim 7, wherein the rerouting of the messages addressed to the first port of the server application is done in a way that is transparent to the client application (Col. 8, lines 46 – 57).

Regarding claim 24, Inicki in combination with Subramaniam teaches the method according to claim 7, wherein the second security level of encryption provides for exchange of messages which are unencrypted (See Subramaniam, Col. 9, lines 11-17).

Claims 14 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Inicki in view of Subramaniam, and in further view of Rees (6981265).

Regarding claim 14, Inicki teaches a method for allowing a client application to establish, in a client network, a first connection at a first security level with a first port of a server application hosted in a server machine linked to a server network, in order to send messages addressed to the server machine, said messages passing from the client network to the server network through a network layer of a gateway machine, the method comprising:

generating, in the gateway machine, a processing thread which establishes said first connection (Col. 5, lines 21 -25);

activating, in the gateway machine, a secure application proxy that performs security processing at the first security level and that reroutes the messages addressed

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to the first port of the server application away from the first connection (Col. 5, lines 21 - 25); and,

establishing at a second security level, a second connection between a port of the server application and the gateway machine, said port being configured to receive at least one message at a second security level from the gateway machine via said second connection (Col. 8, lines 46 – 57), and

wherein said generating step is performed in response to detection of a request from the client application addressed to the first port of the server application to establish said first connection; and wherein said second connection is unknown to said client application (Col. 8, lines 46 – 57).

Ilnicki does not explicitly indicate that the gateway server establishes a connection with a second port of the server application, rather than a first port or that the second security level is lower than the first.

Rees teaches a system for relaying messages from an external network into an internal network through a gateway (Fig. 11) that includes a teaching that messages forwarded to port 1 of a port inside the network can be forwarded to a different port inside the network by the gateway (Col. 22, line 50 – Col. 23, line 20).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Rees teaching of allowing the gateway redirect a communication from a first port to a second to allow communications external to the target server's network access ports which only internal user's can access.

Subramaniam teaches a system which redirects requests to a target server to a gateway/border server which creates a secure encrypted connection from that gateway to the client and a second differently secured connection from the gateway to the target server (Col. 6, lines 40 – 45; Col. 7, lines 24 – 35; Col. 8, lines 13 – 19; Col. 9, lines 11 – 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made that Subramaniam's teaching can be incorporated into Ilnicki's system so that if the network is configured that the gateway gets places on the edge of a private network, a secure connection needs only to be maintained as far as the public network and the security session information does not need to be continued into the more secure private network.

Regarding claim 22, Ilnicki teaches a method as claimed in claim 14, wherein the rerouting of the messages addressed to the first port of the server application is done in a way that is transparent to the client application (Col. 8, lines 46 – 57).

Claim 25 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ilnicki in view of Subramaniam, and in further view of Shimbo (6092191).

Regarding claim 25, Ilnicki in combination of Subramaniam teaches the method according to claim 7, but does not explicitly indicate wherein the second security level of encryption is at a greater security level than a security level of no encryption.

Shimbo teaches a system with security gateways which intercept and redirect network traffic which includes the concept that each destination and each host can have

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different levels of encryption designed to them, and the security gateway provides encryption services to allow those encryption services to be reached (Col. 33, lines 20 - Col. 34, line 2).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use Shimbo's teaching of encryption levels based on nodes in the network and using a gateway to alter the encryption level of information to allow client and servers in Ilnicki's system to operate at different encryption levels without having to negotiate those levels, including cases where the server receives information at a lower security level than the client is providing the information.

Response to Arguments

Applicant's arguments filed February 14, 2011 have been fully considered but they are not persuasive.

The applicant argues that the grounds of rejection mailed August 13, 2010 were not sufficiently clear. The examiner disagrees. While there may have been typos in regards to the header section of the grounds of rejection, the written rejections were written to provide a prima facie case for the prior art rejections. Claim 24 was fully mapped and listed as a rejection under the 35 USC §103(a) Ilnicki in view of Subramaniam. Additionally, the applicant provided a full response to the correct grounds of rejection and as result was not prejudiced by the formatting error.

The applicant argues that Ilnicki teaches away from the combination of having multiple levels of security because it is directed towards having a single end to end SSL

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connection. See remarks, pp. 8-10. The examiner disagrees; while Ilnicki teaches a way of providing a secure connection through an intermediate gateway while maintaining the security of the connection (Col. 2, ll. 46 - 63), having a complete disclosure of an invention does not prohibit improvements to be made to said teaching by one of ordinary skill in the art. Ilnicki is primarily involves creating two separate sessions of security involving the gateway device, suggesting that both connections are SSL connections does not prevent one of ordinary skill in improving portions of Ilnicki's invention based on secondary teachings.

The applicant argues that the combination of Ilnicki with Subramaniam would require the gateway to operate differently then originally intended in the Ilnicki's disclosure. The examiner agrees, while making use of the secondary teaching of Subramaniam would require different programming of the gateway disclosed in Ilnicki. However, such changes to the gateway in Ilnicki does not defeat the combination because it would be within the scope of one of ordinary skill's ability to change the operation of the gateway to improve the Ilnicki's reference as taught by the secondary reference and would be motivated to do so based on the motivation offered in the rejection.

The applicant argues that Subramaniam does not suggest routing security level of encryption, but instead only uses secure or not secure URL references. See remarks, pp. 11-12. The examiner disagrees, Subramaniam teaches and is relied upon to teach secure connections between intermediate servers and the client and server. Subramaniam does so in Col. 8, ll. 13 - 30. The URL may indicate to the client and

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border server which protocol to use, but the connection itself is taught to be either secure or insecure.

The applicant argues that Subramaniam as combined with Ilnicki would require the target server to do more processing within the system. See remarks, pp. 12-15.

The examiner has no opinion of this statement because no limitation in the claim requires work be offloaded from the target server and the motivation to combine the references does not involve offloading work from the target server.

The applicant argues that the combination would not teaches a first and second security level of encryption because it only suggestions having no secure connection and continuing that security. See remarks, p. 13. The examiner disagrees, Subramaniam teaches a SSL secure connection and a non-secure connection thus those two connections require two levels of encryption as required by the claim language.

Conclusion

THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any

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extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to KEVIN BATES whose telephone number is (571)272-3980. The examiner can normally be reached on M-F 8 am - 5 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on (571) 272-3880. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/KEVIN BATES/
Primary Examiner, Art Unit 2456